A New Centrolenid Frog From Guyana

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While investigating the status of some frogs from the Guyanas recently I had occasion to examine two specimens from Guyana (formerly British Guiana) in the British Museum of Natural History. They differ from all other species now known from Northeastern South America and are apparently without a name. I propose that they be called

Centrolenella taylori, n. sp.

Type. British Museum (Nat. Hist.) 1939.1.1.65, adult male; at an elevation of 750 ft. along the New River, Guyana; collected by C. A. Hudson.

Paratypes. British Museum (Nat. Hist.) 1939.1.1.64, adult male; same data as the type; Rijksmuseum v. Naturrlijke Historie, 11472, Marowijne River, Suriname, 11473, Nassaugebergte, Marowijne, Suriname; and 11474 from Langa Soela on the Paleomeu River at the base of Grensgebergte, Suriname.

Diagnosis. A toothless centrolenid with a lavender dorsum (in preservative), white visceral peritoneum, one and one-half phalanges of fingers three and four free of web and a rather distinct tympanum.

In the absence of teeth it is similar to *C. fleischmanni* (Boettger, 1893) but it differs from that species in its dorsal pigmentation, more slender build and in having the fingers more extensively webbed. In pattern and general build it is similar to *C. antisthenesi* (Goin, 1963) but it may be distinguished from that species by its absence of vomerine teeth.

Description. Vomerine teeth absent; the small, rounded choanae separated by about 3 times their own diameter; tongue one-half as wide as mouth-opening, rounded, its posterior border free and unnotched. Snout short, rounded when viewed from above, truncate in profile, the upper jaw extending hardly at all beyond lower; nostrils more lateral than superior, not projecting, their distance from end of snout about equal that from eye, separated from each other by an interval equal to their distance from eye. Canthus rostralis slightly defined; loreal region slightly concave and slightly oblique, the upper lip not flaring out appreciably below it. Eye moderate, very prominent, its diameter

greater than its distance from nostril; palpebral membrane not reticulate; interorbital distance slightly greater than width of upper eyelid, which is relatively wide and about equal the distance between nostrils. Tympanum very indistinct, about one-third the diameter of eye, separated from eye by a distance about equal to one-half its own diameter. Fingers webbed from base of penulti-



Fig. 1. Type of $Centrolenella\ taylori,\ BM(NH)\ 1939.1.1.65.$ Paul Laessle, del.

mate phalanx of fourth to middle of penultimate phalanx of third, a web at the base between fingers two and three, no web between fingers one and two. Fingers 3-4-1-2 in order of decreasing length; fourth considerably longer than second, just reaching to middle of penultimate phalanx of third: disk of third covers the tympanic area; no projecting rudiment of a pollex: no ulnar ridge; toes nearly completely webbed, the web on fourth toe reaching the base of the penultimate phalanx, third and fifth subequal, disk of fourth covering about one-half the tympanic area; indistinct metatarsal tubercles; no tarsal ridge, no dermal appendage on heel. Body not elongate, in post-axillary region a little narrower than greatest width of head; when hind leg is adpressed, heel reaches to nostril; when limbs are laid along the side, knee and elbow considerably overlap; when hind legs are bent at right angles to body, heels overlap slightly. No patagium extends from the back of the upper arm to the side of the body. Skin of upper parts smooth; a very indistinct narrow glandular ridge passing above tympanic area; skin of throat, chest, belly and lower surface of thigh smooth; traces of a skinfold across chest; adult male, vocal sac wrinkled but without pigment. Skin of head not coossified with skull, roof of skull not exostosed.

Dimensions. Head and body 18.5 mm; head length 5.5 mm; head width 7.6 mm; femur 9.5 mm; tibia 10.00 mm; heel-to-toe 14.5 mm.

Color in alcohol. Top of head, dorsum, lower arm and outer fingers, legs and feet lavender although the lavender pigmentation is restricted to a rather narrow band on the dorsal surfaces of the thighs. This dorsal pigmentation beset with fairly numerous, small rounded pigmentless clear areas giving a pattern of light or clear spots on a dorsum of lavender.

DISCUSSION

With the recognition of *C. taylori* the number of species of this family in the Guianas and in Venezuela east of the Andes becomes four. Two of these are forms with vomerine teeth and with the first finger shorter than the second. One of these, *C. antisthenesi* is known only from the Coastal Range in Venezuela and the other, *C. geijskesi* (Goin 1966) is known only from the Guyana highlands in Suriname.

The remaining two are species without vomerine teeth and with the first finger longer than the second. They are also similar in that they have opaque white visceral peritoneum but transparent, unpigmented parietal peritoneum. One of them C. fleischmanni, fades to white in preservative while the other, C. taylori, has a lavender dorsum in preservation. The former species, fleischmanni, extends along the coastal region of Venezuela and the Guianas while C. taylori is at present known only from the Guyana highlands. It is not at all improbable that the form Rivero (1961: p. 152) described but did not name from the Guyana highlands in Venezuela is taylori. He described it as similar to fleischmanni but with a pigmented dorsum.

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LITERATURE CITED

- BOETTGER, O. 1893. Ein neuer Laubfrosch aus Costa Rica. Ber. Naturf. Gesellsch., Frankfort am Main, 1892-1893 (1893), pp. 251-252.
- Goin, C. J. 1963. A new centrolenid frog from Venezuela. Acta Biologica Venezuelica. Vol. 3, no. 18, pp. 283-286.
- Goin, C. J. 1966. A new frog of the genus Centrolenella from Suriname. Studies on the Fauna of Suriname and other Guyanas. Vol. VIII, no. 32, pp. 77-80.
- RIVERO, J. A. 1961. Salientia of Venezuela. Bull. Mus. Comp. Zool. Vol. 126, no. 1, pp. 1-207.

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